ENVIRONMENTAL SITE INVESTIGATION REPORT

Leader Beverage Corporation
Putney Road
Brattleboro, Vermont
DEC Site #94-1623

Prepared For:

Mr. Lee Merrill
Barrows Coal Company
35 Main Street
Brattleboro, VT 05301

Prepared By:

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November 4, 1994

ENSA Environmental, Inc. Job #432

EXECUTIVE SUMMARY

ENSA Environmental, Inc. (formerly ENSA/TRI-S, Inc.) of Brattleboro, Vermont, performed an environmental site investigation of the Leader Beverage Corporation property located on Putney Road in Brattleboro, Vermont. The purpose of the investigation was to define the degree and extent of soil and groundwater contamination at the site, and to identify sensitive receptors which might be impacted by such contamination.

A 4,000 gallon UST which had been used to store gasoline for delivery trucks was suspected of leaking, and therefore was removed from the site on May 13, 1994. At that time, soil samples from the tank pit were screened with a photoionization detector (PID); the maximum concentration of Volatile Organic Compounds (VOCs) detected was 35 ppm. About 9 cubic yards of contaminated soils from the tank removal remain polyencapsulated onsite.

Drinking water at the site is obtained from an onsite well, located approximately 280 feet from the former UST location. This well is also the source of "Vermont Spring Water," which is bottled and sold commercially. The well is reportedly pumped approximately twice a week for this purpose, and draws water from a depth of approximately 80-90 feet.

On August 24, four soil borings were advanced within and around the former UST location. Headspace screening of split spoon soil samples from the borings indicated no contamination in the tank pit. Contamination was detected in boring LB-4, located 45 feet from the tank pit, and a monitoring well was emplaced in the borehole. Laboratory analysis of soil and groundwater from LB-4 revealed the presence of BTEX compounds, Naphthalene, 1,3,5-Trimethylbenzene and 1,2,4-Trimethylbenzene in both soil and groundwater.

Groundwater was encountered at depths of 7 to 10 feet during drilling. Based on drainage patterns and topography, groundwater flow direction is estimated to be to the west-southwest.

Conclusions and recommendations are presented at the end of this report.

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1.00 INTRODUCTION

A 4,000 gallon gasoline underground storage tank (UST) was removed from the Leader Beverage Corporation property on Putney Road in Brattleboro, Vermont on May 13, 1994. Petroleum contaminated soil (up to 35 ppm VOCs, as detected with a PID) was encountered during the tank removal, and approximately 9 cubic yards were polyencapsulated. ENSA Environmental, Inc. (formerly known as ENSA/TRI-S, Inc.) of Brattleboro, Vermont submitted tank removal forms to the Vermont Department of Environmental Conservation (VT DEC). After reviewing that information, the DEC Sites Management Section (SMS) required that additional work be conducted to define the degree and extent of soil and groundwater contamination at the site, and to identify any sensitive receptors which might be impacted by such contamination. This work included limited subsurface exploration in and around the location of the gasoline UST removed in May 1994.

Conclusions and recommendations generated in this report are based solely on information obtained during the course of this investigation. Changes in site conditions, or new information not available for review at the time of this investigation, may necessitate an update of conclusions and recommendations presented in this report.

2.00 SITE DESCRIPTION

Leader Beverage Corporation is located on the west side of Putney Road, approximately 0.75 miles north of interchange 3 of Interstate Route 91 in Brattleboro, Vermont. The site is in a commercially developed area. I-91 is located immediately to the south of the property. DeWitt Beverage Corporation is located to the north on Putney Road. Behind the site, to the west, is undeveloped, wooded land. A site locus map, based on the USGS Topographic map of the Newfane, Vermont Quadrangle, is presented in Appendix A of this report.

Leader Beverage Corporation is a distributor of Pepsi-Cola products; the Putney Road site is in use as a warehouse. The building is heated with propane stored underground behind the building. Drinking water at the site is obtained from a well located on the south side of the property, between the site building and I-91. This well is also the source for commercially sold "Vermont Spring Water," which is bottled and distributed by Leader Beverage Corporation. According to Leader Beverage personnel, this gravel well draws water from a depth of about 80-90 feet, and is actively pumped approximately twice a week. The flow rate from the well is reportedly about 50 gallons per minute (gpm).

Two USTs and associated pumps, owned by Barrows Coal Company and used to store and dispense fuel for Leader Beverage delivery trucks, are located behind the building. The tanks are 5,000 and 10,000 gallons in size, and contain gasoline and diesel fuel, respectively. Both tanks are sixteen years old, and according to Barrows personnel, both tested tight within the year. The gasoline UST is located adjacent to the former location of the UST removed in May. The diesel UST is located between the pump island and the site building. These locations are shown on the site sketch presented in Appendix A of this report.

The USGS Topographic map (Appendix A) shows the site to be at an elevation of approximately 266 feet above mean sea level. Also according to this map, there is a stream located approximately 200 feet north of the site building. This stream flows to the west and joins another, which flows to the south behind the site. A groundwater seep from an embankment approximately 80 feet west of the tank pit was observed during the UST removal on May 13, 1994. No sheen or odor was noted at the seep.

3.00 SUBSURFACE EXPLORATIONS AND ANALYSES

3.10 Soil Borings and Monitoring Wells

In order to further define the degree and extent of soil and groundwater contamination in the vicinity of the former UST, four soil borings were advanced by a mobile drill rig. Borings were advanced on August 24, 1994, by T&K Drilling of Troy, VT, overseen by ENSA personnel. At the direction of the SMS, monitoring wells were not to be installed unless VOCs were detected in the split spoon soil samples collected at the water table depth range. Boring locations are shown on the site sketch presented in Appendix A of this report.

3.20 Field Screening of Soil Samples

During drilling, split-spoon soil samples were obtained from each of the boreholes. The first borehole, LB-1, was advanced in the tank pit; continuous sampling was performed in this boring. Samples were obtained at five-foot intervals from subsequent borings.

Soil samples were field screened for VOCs with a Thermo Environmental Instruments Model 580B Organic Vapor Meter (OVM), field calibrated to 250 parts per million (ppm) of an Isobutylene span gas. Results of sample headspace screening are presented in Table 1, below. Results of sample headspace screenings ranged from 0.0 to 91.7 ppm; the only boring with significant levels of VOCs is LB-4, located near the edge of pavement west of the pump island. When a reading of 6.6 ppm was obtained from the 10-12 foot sample of that boring, it was decided to continue drilling to determine the trend in VOC levels. Had the VOC reading at 10-12 feet been 0.0, the boring would have been terminated; groundwater had been encountered between 7 and 10 feet. An OVM reading of 91.4 ppm was obtained from the next split spoon sample, at 15-17 feet. A strong odor uncharacteristic of gasoline was perceived in soils from this depth. Because the OVM reading closer to the groundwater table was significantly lower than that at 15-17 feet, it was thought possible that the soil was contaminated by a substance denser than water.

Table 1. Results of headspace screening of split-spoon soil samples. VOC concentrations in ppm.

Depth range (ft.)	LB-1	LB-2	LB-3	LB-4
0-2	0.0	0.0	0.4	1.3
2-4	0.0	-	-	-
4-6	0.0	-	-	-
5-7	-	0.0	0.0	0.0
6-8	0.0	-	-	-
8-10	0.0	-	-	-
10-12	-	0.0	0.0	6.6
15-17	-	-	-	91.7
20-22	-	-	-	6.6

The SMS was contacted in order to report site conditions and suggest that a monitoring well be installed in LB-4, even though no contamination had been detected at the groundwater interface. Bob Haslam of the SMS approved a monitoring well at this location. Another sample was taken at 20-22 feet below grade; this sample was somewhat more silty than the 15-17 foot sample and did not have the same strong odor. Its headspace reading was 6.6 ppm. Soil boring/monitoring well construction logs are presented in Appendix B of this report.

3.30 Laboratory Analysis of Site Soils and Groundwater

The soil sample from the 15-17 foot depth range of LB-4 was submitted to Alpha Analytical Laboratories in Westborough, Massachusetts for analysis for Volatile Organic Compounds via US EPA Method 8260. On September 2, 1994, a groundwater sample was collected from monitoring well LB-4. The sample had an odor of weathered gasoline. It was refrigerated and submitted to Alpha Analytical for analysis via US EPA Method 8260. Contaminants detected in soil and groundwater from LB-4 are as follows:

Contaminant	Concentration in groundwater (ug/l)	Concentration in soil (ug/kg)
Benzene	1,400	79
Toluene	6,700	360
Ethylbenzene	600	77
Xylenes	5,700	510
Naphthalene	200	85
1,3,5-Trimethylbenzene	280	75
1,2,4-Trimethylbenzene	870	120

The compounds detected are characteristic of gasoline. No other contaminants tested for were detected in the samples analyzed. Complete laboratory reports are presented in Appendix C of this report.

3.40 Groundwater Levels and Flow Direction

During drilling on August 24, groundwater was observed to occur at depths of 7-10 feet. At the tank removal on May 13, 1994, groundwater was encountered at about 10 feet.

Because only one monitoring well was installed at the site, groundwater flow direction could not be calculated. Based on local topography as well as the presence of a groundwater seep from an embankment approximately 80 feet west of the tank pit and a stream flowing in a southerly direction approximately 230 feet west of the tank pit, [redacted]

3.50 Screening of Stockpiled Soils

Approximately 9 cubic yards of contaminated soils encountered during the removal of the 4,000 gallon gasoline UST from the site in May, 1994 are stockpiled just northwest of the former UST location. The soils were screened with an OVM on October 21, 1994. VOC levels as detected with the OVM ranged from 0.0 to 2.0 ppm.

4.00 RISK EVALUATION

4.10 Potential Sources

Based on sample headspace screening described above, no contamination was detected in the former location of the gasoline UST. Therefore, that tank does not, at this point, appear to have been a source of contamination beyond that recovered in the soils which were stockpiled from the excavation.

Both soil and groundwater contamination were detected in LB-4. Benzene levels detected are well above drinking water guidelines. The exact source of the contamination is unknown. LB-4 is located approximately 45 feet south of the former UST area. [redacted], and the pump island is located east-northeast of LB-4. The tanks and the pumps, as well as associated piping, must be considered potential sources based on theoretical groundwater flow direction and analytical results summarized above.

4.20 Potential Receptors

The potential sensitive receptor of most immediate concern is [redacted] which is bottled and sold commercially. That well is located approximately [redacted] If groundwater flow at the site is to the west-southwest, as estimated based on topography and drainage features, then this well would appear to be off-gradient of the contamination detected. However, groundwater flow direction cannot be determined without additional monitoring wells at the site. Furthermore, the effects of active pumping of the drinking water well on site-specific groundwater flow are unknown.

According to Town of Brattleboro records, other drinking water wells within a half mile of the site are as follows:

Distance and direction from site	Depth	Owner
0.15 miles southwest (across stream)	105 feet	G. Moore & Son, Builders
0.2 miles southeast	500 feet	C&S Grocers
0.3 miles south	470 feet	Quality Inn
0.3 miles south	595 feet	Quality Inn
0.5 miles west-southwest	200 feet	Scott Simons
0.5 miles south	475 feet	American Optical Co.

Potential environmental receptors include the wetland area encompassing the groundwater seep to the west of the tank pit and the stream located further to the west behind the site. The s[redacted] and the s[redacted]

5.00 CONCLUSIONS AND RECOMMENDATIONS

5.10 Conclusions

- The stockpiled soils from the UST removal in May 1994 have been screened with an OVM, and contain VOC levels of 2 ppm or less.
- No soil contamination was detected in the former UST location.
- Gasoline contamination of soil and groundwater was detected in a boring located to the south of the tank pit. The source of the contamination is unknown. Benzene levels detected are well above drinking water guidelines.
- The site drinking water well is also the source of commercially sold "Vermont Spring Water." The well reportedly draws from a depth of 80-90 feet, and is located about 280 feet southeast of the monitoring well in which contamination was detected.
- Because no other monitoring wells exist in the subject area, neither the direction of groundwater flow nor the plume of contamination could be properly assessed.

5.20 Recommendations

ENSA Environmental, Inc. recommends that three additional monitoring wells be installed at this site. Groundwater elevation data from additional wells are essential in order to determine groundwater flow direction with certainty. Laboratory analyses of groundwater samples from additional wells are necessary for delineation of the areal extent of contamination at the site.

Groundwater samples from three wells to be installed and from LB-4, as well as a sample from the site drinking water and production well, should be analyzed for VOCs via US EPA Method 8260.

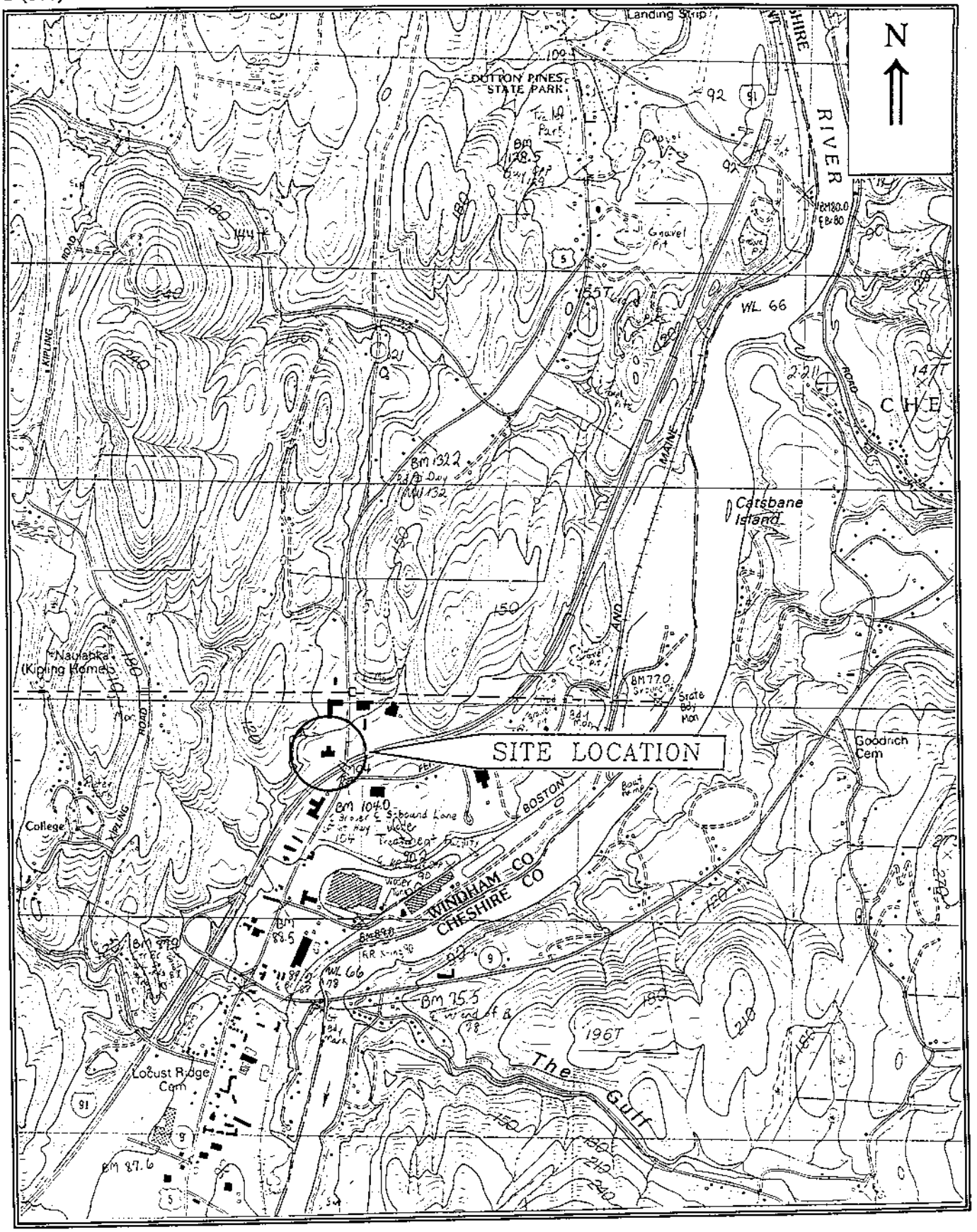
Our recommendation regarding the stockpiled soils, based on results of field screening described above, is that they be spread on site or used as fill.

APPENDIX A

SITE LOCUS MAP
SITE SKETCH

ENSA ENVIRONMENTAL, INC.
1-(800)-359-3677

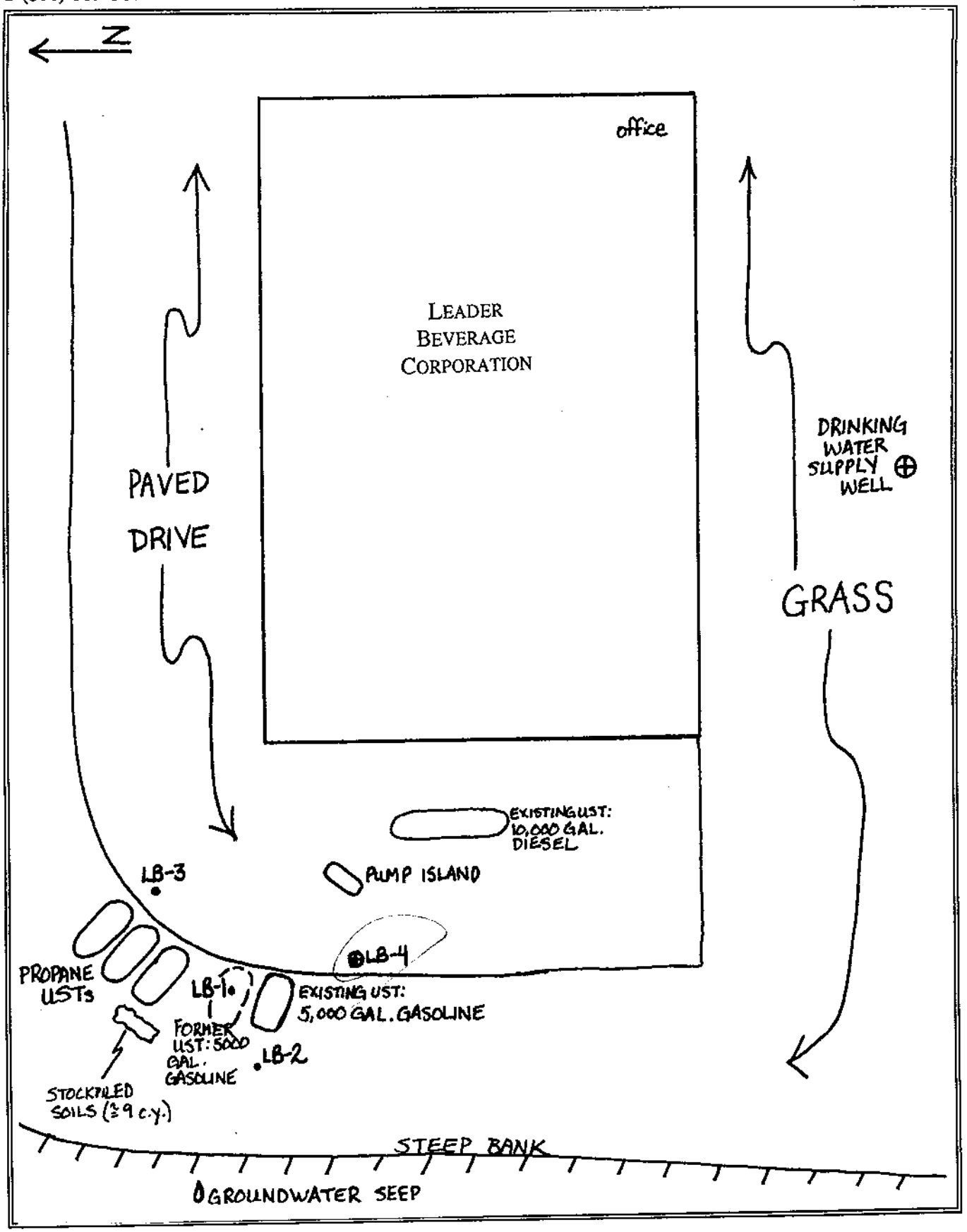
205 Main Street
Brattleboro, VT 05301



Site Locus Scale 1:25,000	USGS Topographic Map Newfane, VT Quadrangle Provisional Edition, 1984	Leader Beverage Corporation Putney Road Brattleboro, VT

ENSA ENVIRONMENTAL, INC.
1-(800)-359-3677

205 Main Street
Brattleboro, VT 05301



Site Sketch Not to scale.	Prepared by: SLC	Leader Beverage Corporation Putney Road Brattleboro, VT

APPENDIX B

WELL BORING/MONITORING WELL CONSTRUCTION LOGS

ENSA ENVIRONMENTAL, INC.
SOIL BORING/MONITORING WELL CONSTRUCTION LOG

Project #: 432 Date: 8/24/94
Project Name: Leader Beverage Corp.
Location: Putney Road, Brattleboro, VT
Driller: T&K Drilling
ENSA Personnel: SLC
Boring/Well #: LB-1 Sheet 1 of 1

SITE LOCUS

Within tank pit, about 2 feet below grade.

Depth	Blow Counts 0-6	6-12	12-18	18-24	Rec.	OVM	Soil Characterization	As Built
0-2	1	1	3	1	6	ND	Medium-grained, brown sand.	
2-4	1	1	2	1	8	ND	Medium-grained, brown sand.	
4-6	1	1	1	1	12	ND	Groundwater at 5 feet. Medium-grained sand.	
6-8	1	1	1	5	10	ND	Medium- to fine-grained sands, wet.	
8-10	3	3	5	7	18	ND	Medium- to fine-grained sands, wet.	

Drilling Method: HSA
Total Well Depth: N/A
Groundwater Depth: 5 ft.
PVC Elevation: N/A

Screen Diameter: N/A Length: N/A
Riser Diameter: N/A Length: N/A
Slot Size: N/A
Ground Elevation:

Notes:
1. Split spoon soil samples are screened for organic vapors via headspace method using a Thermo Environmental Instruments Inc. Organic Vapor Meter Model 580B.
2. ND indicates nondetectable contaminant concentrations as read by the OVM.
3. Samples are collected using a Split Spoon Sampler unless otherwise indicated.
4. Split Spoon Sampler has a 2" diameter and is driven using a 140 lb. hammer falling 30 inches.
5. HSA = Hollow Stem Auger, AR = Air Rotary

ENSA ENVIRONMENTAL, INC.
SOIL BORING/MONITORING WELL CONSTRUCTION LOG

Project #: 432 Date: 8/24/94
Project Name: Leader Beverage Corp.
Location: Putney Road, Brattleboro, VT
Driller: T&K Drilling
ENSA Personnel: SLC
Boring/Well #: LB-2 Sheet 1 of 1

SITE LOCUS

About 40 feet southwest of LB-1, in the grassy area behind an existing UST.

Depth	Blow Counts 0-6	6-12	12-18	18-24	Rec.	OVM	Soil Characterization	As Built
0-2	3	4	8	8	14	ND	Medium-grained, brown sandy loam with roots; some cobbles.	
5-7	4	4	7	8	17	ND	Medium- to fine-grained sand, some silt. Wet at top of spoon, less so at bottom.	
10-12	3	2	4	4	20	ND	Wet, silty sand.	

Drilling Method: HSA
Total Well Depth: N/A
Groundwater Depth: 5 ft.
PVC Elevation: N/A

Screen Diameter: N/A Length: N/A
Riser Diameter: N/A Length: N/A
Slot Size: N/A
Ground Elevation:

Notes:
1. Split spoon soil samples are screened for organic vapors via headspace method using a Thermo Environmental Instruments Inc. Organic Vapor Meter Model 580B.
2. ND indicates nondetectable contaminant concentrations as read by the OVM.
3. Samples are collected using a Split Spoon Sampler unless otherwise indicated.
4. Split Spoon Sampler has a 2" diameter and is driven using a 140 lb. hammer falling 30 inches.
5. HSA = Hollow Stem Auger, AR = Air Rotary

ENSA ENVIRONMENTAL, INC.
SOIL BORING/MONITORING WELL CONSTRUCTION LOG

Project #: 432 Date: 8/24/94
Project Name: Leader Beverage Corp.
Location: Putney Road, Brattleboro, VT
Driller: T&K Drilling
ENSA Personnel: SLC
Boring/Well #: LB-3 Sheet 1 of 1

SITE LOCUS

In paved area in front of propane USTs.

Depth	Blow Counts 0-6	6-12	12-18	18-24	Rec.	OVM	Soil Characterization	As Built
0-2	8	7	11	13	18	0.4	Medium- to coarse-grained sand; some fine-grained sand.	
5-7	4	10	8	12	11	ND	Medium-grained brown sand.	
10-12	3	4	4	5	18	ND	Wet, medium-grained sand.	

Drilling Method: HSA
Total Well Depth: N/A
Groundwater Depth:
PVC Elevation: N/A

Screen Diameter: N/A Length: N/A
Riser Diameter: N/A Length: N/A
Slot Size: N/A
Ground Elevation:

Notes:
1. Split spoon soil samples are screened for organic vapors via headspace method using a Thermo Environmental Instruments Inc. Organic Vapor Meter Model 580B.
2. ND indicates nondetectable contaminant concentrations as read by the OVM.
3. Samples are collected using a Split Spoon Sampler unless otherwise indicated.
4. Split Spoon Sampler has a 2" diameter and is driven using a 140 lb. hammer falling 30 inches.
5. HSA = Hollow Stem Auger, AR = Air Rotary

ENSA ENVIRONMENTAL, INC.
SOIL BORING/MONITORING WELL CONSTRUCTION LOG

Project #: 432 Date: 8/24/94
Project Name: Leader Beverage Corp.
Location: Putney Road, Brattleboro, VT
Driller: T&K Drilling
ENSA Personnel: SLC
Boring/Well #: LB-4 Sheet 1 of 1

SITE LOCUS

At edge of pavement, west-southwest of pump island.

Depth	Blow Counts 0-6	6-12	12-18	18-24	Rec.	OVM	Soil Characterization	As Built
0-2	10	11	13	9	18	1.3	Medium- to coarse-grained sand; some pebbles.	
5-7	6	7	7	8	13	ND	6" medium-grained sand, then 7" finely layered fine-grained sand	
10-12	2	5	4	4	20	6.6	Wet, medium- to fine-grained sand.	
15-17	1	2	2	1	20	91.7	Wet, medium- to fine-grained sand. Strong, sweet odor.	
20-22	2	2	2	3	22	6.6	Wet, medium- to fine-grained sand and silt.	

Drilling Method: HSA
Total Well Depth: 17'
Groundwater Depth: 11'
PVC Elevation:

Screen Diameter: 2" Length: 10'
Riser Diameter: 2" Length: 7'
Slot Size: 0.010
Ground Elevation:

Notes:
1. Split spoon soil samples are screened for organic vapors via headspace method using a Thermo Environmental Instruments Inc. Organic Vapor Meter Model 580B.
2. ND indicates nondetectable contaminant concentrations as read by the OVM.
3. Samples are collected using a Split Spoon Sampler unless otherwise indicated.
4. Split Spoon Sampler has a 2" diameter and is driven using a 140 lb. hammer falling 30 inches.
5. HSA = Hollow Stem Auger, AR = Air Rotary

APPENDIX C

LABORATORY RESULTS

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

CERTIFICATE OF ANALYSIS

Client: ENSA Environmental, Inc.
Address: 205 Main Street; 3rd Floor
Brattleboro, VT 05301
Attn: Susan Chaffee
Project Number: 432
Site: Leader Beverage Corp.

Laboratory Job Number: L9406934
Invoice Number: 66384
Date Received: 25-AUG-94
Date Reported: 08-SEP-94
Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L9406934-01	LB-4 15-17'	Brattleboro, VT

Authorized by: James R. Roth

James R. Roth, PhD - Laboratory Manager

RECEIVED SEP 12 1994

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9406934-01
LB-4 15-17'
Sample Matrix: SOIL

Date Collected: 24-AUG-94
Date Received : 25-AUG-94
Date Reported : 08-SEP-94

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 1 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP	DATES ANALYSIS
Solids, Total	73.	%	3	2540B		07-Sep
Volatile Organics by GC/MS			1	8260		31-AUG
Methylene chloride	< 34.	ug/kg				
1,1-Dichloroethane	< 10.	ug/kg				
Chloroform	< 10.	ug/kg				
Carbon tetrachloride	< 6.8	ug/kg				
1,2-Dichloropropane	< 24.	ug/kg				
Dibromochloromethane	< 6.8	ug/kg				
1,1,2-Trichloroethane	< 10.	ug/kg				
2-Chloroethylvinyl ether	< 68.	ug/kg				
Tetrachloroethene	< 10.	ug/kg				
Chlorobenzene	< 24.	ug/kg				
Trichlorofluoromethane	< 34.	ug/kg				
1,2-Dichloroethane	< 10.	ug/kg				
1,1,1-Trichloroethane	< 6.8	ug/kg				
Bromodichloromethane	< 6.8	ug/kg				
trans-1,3-Dichloropropene	< 10.	ug/kg				
cis-1,3-Dichloropropene	< 6.8	ug/kg				
Bromoform	< 6.8	ug/kg				
1,1,2,2-Tetrachloroethane	< 6.8	ug/kg				
[redacted]	[redacted]	ug/kg				
[redacted]	[redacted]	ug/kg				
[redacted]ne	[redacted]	ug/kg				
Chloromethane	< 68.	ug/kg				
Bromomethane	< 14.	ug/kg				
Vinyl chloride	< 24.	ug/kg				
Chloroethane	< 14.	ug/kg				
1,1-Dichloroethene	< 10.	ug/kg				
trans-1,2-Dichloroethene	< 10.	ug/kg				
Trichloroethene	< 6.8	ug/kg				
1,2-Dichlorobenzene	< 68.	ug/kg				
1,3-Dichlorobenzene	< 68.	ug/kg				
1,4-Dichlorobenzene	< 68.	ug/kg				
Methyl tert butyl ether	< 68.	ug/kg				
[redacted]	[redacted]	ug/kg				
cis-1,2-Dichloroethene	< 6.8	ug/kg				
Dibromomethane	< 68.	ug/kg				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

RECEIVED SEP 12 1994

Laboratory Sample Number: L9406934-01

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued			1	8260		31-AUG
1,4-Dichlorobutane	< 68.	ug/kg				
Iodomethane	< 68.	ug/kg				
1,2,3-Trichloropropane	< 68.	ug/kg				
Styrene	< 6.8	ug/kg				
Dichlorodifluoromethane	< 68.	ug/kg				
Acetone	< 68.	ug/kg				
Carbon Disulfide	< 68.	ug/kg				
2-Butanone	< 31.	ug/kg				
Vinyl Acetate	< 68.	ug/kg				
4-Methyl-2-pentanone	< 68.	ug/kg				
2-Hexanone	< 68.	ug/kg				
Ethyl methacrylate	< 68.	ug/kg				
Acrolein	< 170	ug/kg				
Acrylonitrile	< 68.	ug/kg				
Bromochloromethane	< 34.	ug/kg				
2,2-Dichloropropane	< 34.	ug/kg				
1,2-Dibromoethane	< 34.	ug/kg				
1,3-Dichloropropane	< 34.	ug/kg				
1,1,1,2-Tetrachloroethane	< 34.	ug/kg				
Bromobenzene	< 34.	ug/kg				
n-Butylbenzene	< 34.	ug/kg				
sec-Butylbenzene	< 34.	ug/kg				
tert-Butylbenzene	< 34.	ug/kg				
o-Chlorotoluene	< 34.	ug/kg				
p-Chlorotoluene	< 34.	ug/kg				
1,2-Dibromo-3-chloropropane	< 34.	ug/kg				
Hexachlorobutadiene	< 34.	ug/kg				
Isopropylbenzene	< 34.	ug/kg				
p-Isopropyltoluene	< 34.	ug/kg				
[redacted]	[redacted]	ug/kg				
n-Propylbenzene	< 34.	ug/kg				
1,2,3-Trichlorobenzene	< 34.	ug/kg				
1,2,4-Trichlorobenzene	< 34.	ug/kg				
[redacted]	[redacted]	ug/kg				
[redacted]	[redacted]	ug/kg				
trans-1,4-Dichloro-2-butene	< 34.	ug/kg				
Ethyl ether	< 170	ug/kg				
SURROGATE RECOVERY						
Toluene-d8	100.	%				
4-Bromofluorobenzene	100.	%				
Dibromofluoromethane	103.	%				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE MS/MSD ANALYSIS

Laboratory Job Number: L9406934

Parameter	MS %	MSD %	RPD
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 01			
1,1-Dichloroethene	99	100	1
Trichloroethene	96	99	3
Benzene	98	102	4
Toluene	95	98	3
Chlorobenzene	101	106	5

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. 1986.

3. Standard Methods for Examination of Water and Waste Water. APHA-AWWA-WPCF. 17th Edition. 1989.

GLOSSARY OF TERMS AND SYMBOLS

< Indicates analyte not detected at stated value, i.e. Reporting Detection Limit.

REF Reference number in which test method may be found.

METHOD Method number by which analysis was performed.

ALPHA
Analytical Laboratories, Inc.

Eight Walkup Drive
Westborough, MA 01581-1019
508-898-9220 FAX 508-898-9193

RECEIVED SEP 12 1994

CHAIN OF CUSTODY RECORD and ANALYSIS REQUEST RECORD

No. 36493
Sheet ____ of ____

Company Name: TRI-S
ENSA Environmental, Inc.

Project Number: 432
P.O. Number: 2466

Project Name/Location: Leader Beverage Corp. Brattleboro, VT

Date Received in Lab: 8/25

Date Due: 9/8

Company Address: 205 Main St, 3rd Floor
Brattleboro, VT 05301

Phone Number: 802 254 3677
FAX No.: 254 7630

Project Manager: Susan Chaffee

Alpha Job Number: (Lab use only) 940 6934

Container Codes: P = Plastic V = Vial C = Cube G = Glass A = Amber Glass B = Bacteria Container O = Other

MATRIX / SOURCE CODES: MW = Monitoring Well, RO = Runoff, O = Outfall, W = Well, LF = Landfill, L = Lake/Pond/Ocean, I = Influent, E = Effluent, DW = Drinking Water, R = River Stream, S = Soil, SG = Sludge, B = Bottom Sediment, X1 = Other, X2 = Other

ALPHA Lab # (Lab Use Only)	Sample I.D.	Containers (number/type)	Matrix/Source	Method Preserve. (number of containers): Unpres.	Ice	Nitric	Sulfuric	HCl	Other	Solubles - F.F.	Sampling Date	Sampling Time	Analysis Requested
6934.1	LB-4 15-17'	1/V	soil	✓							8/24/94	3pm	8260 (TCL)

Sampler's Signature: Susan Chaffee
Affiliation:
Date: 8/24/94
Time: 3pm

ADDITIONAL COMMENTS:

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	J. Wesley	[illegible]	8/25	2:35
2	[illegible]	[illegible]	8/25	4:30
3				
4				

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

CERTIFICATE OF ANALYSIS

Client: ENSA Environmental, Inc.
Address: 205 Main Street; 3rd Floor
Brattleboro, VT 05301
Attn: Susan Chaffee
Project Number: 432
Site: Leader Beverage

Laboratory Job Number: L9407187
Invoice Number: 66601
Date Received: 02-SEP-94
Date Reported: 15-SEP-94
Delivery Method: Alpha

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L9407187-01	LB-4-9294-432	Brattleboro, VT

Authorized by: James R. Roth

James R. Roth, PhD - Laboratory Manager

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

RECEIVED SEP 19 1994

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9407187-01
LB-4-9294-432
Sample Matrix: WATER

Date Collected: 02-SEP-94
Date Received : 02-SEP-94
Date Reported : 15-SEP-94

Condition of Sample: Satisfactory

Field Prep: None

Number & Type of Containers: 2 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS			1	8260		13-SEP
Methylene chloride	< 500	ug/l				
1,1-Dichloroethane	< 150	ug/l				
Chloroform	< 150	ug/l				
Carbon tetrachloride	< 100	ug/l				
1,2-Dichloropropane	< 350	ug/l				
Dibromochloromethane	< 100	ug/l				
1,1,2-Trichloroethane	< 150	ug/l				
2-Chloroethylvinyl ether	< 1000	ug/l				
Tetrachloroethene	< 150	ug/l				
Chlorobenzene	< 350	ug/l				
Trichlorofluoromethane	< 500	ug/l				
1,2-Dichloroethane	< 150	ug/l				
1,1,1-Trichloroethane	< 100	ug/l				
Bromodichloromethane	< 100	ug/l				
trans-1,3-Dichloropropene	< 150	ug/l				
cis-1,3-Dichloropropene	< 100	ug/l				
Bromoform	< 100	ug/l				
1,1,2,2-Tetrachloroethane	< [redacted]	ug/l				
[redacted]		ug/l				
[redacted]		ug/l				
[redacted]ne		ug/l				
Chloromethane	< 1000	ug/l				
Bromomethane	< 200	ug/l				
Vinyl chloride	< 350	ug/l				
Chloroethane	< 200	ug/l				
1,1-Dichloroethene	< 150	ug/l				
trans-1,2-Dichloroethene	< 150	ug/l				
Trichloroethene	< 100	ug/l				
1,2-Dichlorobenzene	< 1000	ug/l				
1,3-Dichlorobenzene	< 1000	ug/l				
1,4-Dichlorobenzene	< 1000	ug/l				
Methyl tert butyl ether	< 1000	ug/l				
[redacted]	[redacted]	ug/l				
cis-1,2-Dichloroethene	< 100	ug/l				
Dibromomethane	< 1000	ug/l				
1,4-Dichlorobutane	< 1000	ug/l				
Iodomethane	< 1000	ug/l				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

RECEIVED SEP 19 1994

Laboratory Sample Number: L9407187-01

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP	DATES ANALYSIS
Volatile Organics by GC/MS continued			1	8260		13-SEP
1,2,3-Trichloropropane	< 1000	ug/l				
Styrene	< 100	ug/l				
Dichlorodifluoromethane	< 1000	ug/l				
Acetone	< 1000	ug/l				
Carbon Disulfide	< 1000	ug/l				
2-Butanone	< 450	ug/l				
Vinyl Acetate	< 1000	ug/l				
4-Methyl-2-pentanone	< 1000	ug/l				
2-Hexanone	< 1000	ug/l				
Ethyl methacrylate	< 1000	ug/l				
Acrolein	< 2500	ug/l				
Acrylonitrile	< 1000	ug/l				
Bromochloromethane	< 100	ug/l				
2,2-Dichloropropane	< 100	ug/l				
1,2-Dibromoethane	< 100	ug/l				
1,3-Dichloropropane	< 100	ug/l				
1,1,1,2-Tetrachloroethane	< 100	ug/l				
Bromobenzene	< 100	ug/l				
n-Butylbenzene	< 100	ug/l				
sec-Butylbenzene	< 100	ug/l				
tert-Butylbenzene	< 100	ug/l				
o-Chlorotoluene	< 100	ug/l				
p-Chlorotoluene	< 100	ug/l				
1,2-Dibromo-3-chloropropane	< 100	ug/l				
Hexachlorobutadiene	< 100	ug/l				
Isopropylbenzene	< 100	ug/l				
p-Isopropyltoluene	< 100	ug/l				
[redacted]		ug/l				
n-Propylbenzene	< 100	ug/l				
1,2,3-Trichlorobenzene	< 100	ug/l				
1,2,4-Trich[redacted]	< 100	ug/l				
[redacted]		ug/l				
[redacted]		ug/l				
trans-1,4-Dichloro-2-butene	< 100	ug/l				
Ethyl ether	< 2500	ug/l				
SURROGATE RECOVERY						
Toluene-d8	111.	%				
4-Bromofluorobenzene	110.	%				
Dibromofluoromethane	110.	%				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES
QUALITY ASSURANCE MS/MSD ANALYSIS

Laboratory Job Number: L9407187

Parameter	MS %	MSD %	RPD
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 01			
1,1-Dichloroethene	122	101	19
Trichloroethene	117	98	18
Benzene	127	106	18
Toluene	127	106	18
Chlorobenzene	112	93	19

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. 1986.

GLOSSARY OF TERMS AND SYMBOLS

< Indicates analyte not detected at stated value, i.e. Reporting Detection Limit.

REF Reference number in which test method may be found.

METHOD Method number by which analysis was performed.

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RECEIVED SEP 19 1994

CHAIN OF CUSTODY RECORD and ANALYSIS REQUEST RECORD

No. 36493
Sheet 1 of 1

Company Name: ENSA Environmental, Inc.

Project Number: 432
P.O. Number: 2491

Project Name / Location: Leader Beverage Brattleboro VT.

Date Received in Lab: 9/2

Date Due: 9/16

Company Address: 205 Main St, 3rd Floor Brattleboro, VT 05301

Phone Number: 802 254 3677
FAX No.: 254 7630

Project Manager: Susan Chaffee

Alpha Job Number: (Lab use only) 9407187

Container Codes: P = Plastic V = Vial C = Cube G = Glass A = Amber Glass B = Bacteria Container O = Other

MATRIX / SOURCE CODES: MW = Monitoring Well, RO = Runoff, O = Outfall, W = Well, LF = Landfill, L = Lake/Pond/Ocean, I = Influent, E = Effluent, DW = Drinking Water, R = River Stream, S = Soil, SG = Sludge, B = Bottom Sediment, X1 = Other, X2 = Other

ALPHA Lab # (Lab Use Only)	Sample I.D.	Containers (number/type)	Matrix / Source	Method Preserve. (number of containers): Unpres.	Ice	Nitric	Sulfuric	HCl	Other	Solubles - F.F.	Sampling: Date	Time	Analysis Requested
7187.1	LB-4-9294-452	2/V	MW					(2) X			9/2/94	1030	8260

Sampler's Signature: Kirsten H.J. Wade
Affiliation:
Date:
Time:

ADDITIONAL COMMENTS:

NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1	Sonya Wender		9/2	
2		F. McDuell	9/2/94	
3				
4				